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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/503,170	02/14/2000	Kenji Hashimoto	04329.2230	6174
	590 04/10/2002			
•	HENDERSON, FAF	EXAMINER		
DUNNER LLP 1300 I STREET		DAVIS, ROBERT B		
WASHINGTO	N, DC 20005	ART UNIT	PAPER NUMBER	
				THE DITTORDER
			1722	/_
			DATE MAILED: 04/10/2002	0

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Appl	ication No.	Applicant(s)	·· Y	
		09/5	03,170	HASHIMOTO, KE	ENJI	
	Office Action Summary	Exan	niner	Art Unit		
			ert B. Davis	1722		
D = = i = = d	Th MAILING DATE of this communic	ation app ars o	nth cvrsh twi	ith the correspond nce ac	ldress	
Period fo	or Reply Iortened Statutory Period FC	D DEDIVIS SI	ET TO EXPIRE 3 M	ONTH(S) FROM		
THE - External control	MAILING DATE OF THIS COMMUNIC insions of time may be available under the provisions of SIX (6) MONTHS from the mailing date of this communication of the properties of the provisions of period for reply specified above is less than thirty (30). Defined for reply is specified above, the maximum stature to reply within the set or extended period for reply wreply received by the Office later than three months afted patent term adjustment. See 37 CFR 1.704(b).	CATION.  f 37 CFR 1.136(a). In nication.  days, a reply within the utory period will apply ill. by statute. cause the	no event, however, may a r ne statutory minimum of thin and will expire SIX (6) MON ne application to become AB	eply be timely filed  by (30) days will be considered time  iTHS from the mailing date of this of  ANDONED (35 U.S.C. § 133).	ly. communication.	
1)🖂	Responsive to communication(s) file	d on <u>28 Januar</u>	<u>y 2002</u> .			
2a) <u></u>	This action is FINAL. 2	b)⊠ This actio	on is non-final.			
3) <u> </u>	Since this application is in condition closed in accordance with the praction of Claims	for allowance e ce under <i>Ex par</i>	xcept for formal ma te Quayle, 1935 C.	tters, prosecution as to th D. 11, 453 O.G. 213.	ne merits is	
4) 🖂	Claim(s) 1-15 and 18 is/are pending	in the applicatio	n.			
	4a) Of the above claim(s) 15 and 18 is	s/are withdrawn	from consideration			
5)	Claim(s) is/are allowed.					
6)🛛	Claim(s) <u>1-14</u> is/are rejected.					
7)	Claim(s) is/are objected to.					
8)	Claim(s) are subject to restrict	ion and/or elect	ion requirement.			
Applicat	ion Papers					
,—	The specification is objected to by the	•				
10)	The drawing(s) filed on is/are:					
44)	Applicant may not request that any obje				ner.	
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.  If approved, corrected drawings are required in reply to this Office action.						
12\[	The oath or declaration is objected to					
,	under 35 U.S.C. §§ 119 and 120	o, 1110 <b>-</b> 2141111110	•			
•	Acknowledgment is made of a claim t	or foreian priori	ty under 35 U.S.C.	& 119(a)-(d) or (f).		
,		or roroigir priori	.,	3 (-) (-) (-)		
a)	1. ☐ Certified copies of the priority of	ocuments have	been received.			
	2. Certified copies of the priority of			pplication No		
	3. Copies of the certified copies o application from the Interna	f the priority dod tional Bureau (I	cuments have been PCT Rule 17.2(a)).	received in this National	Stage	
	See the attached detailed Office action					
,	Acknowledgment is made of a claim fo				il application).	
	n) $\square$ The translation of the foreign land Acknowledgment is made of a claim fo					
Attachmer						
2) 🔲 Notic	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PT mation Disclosure Statement(s) (PTO-1449) Pa	O-948) per No(s) <u>2</u> .		Summary (PTO-413) Paper No Informal Patent Application (P1		

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4 - 1-1-16

## **DETAILED ACTION**

- 1. Applicant's election without traverse of Group I, claims 1-14 in Paper No. 5 is acknowledged.
- 2. Claims 15 and 18 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made without traverse in Paper No. 5.

## **Priority**

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

# Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 1-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawakami et al (5,145,691: figures 2 and 3; column 3, lines 36-47; column 4, lines 3-20; column 4, line 67 to column 5, line 9; and column 6, lines 1-6 and 34-37).

Kawakami et al teach an apparatus for applying material to a circuit board comprising: a retaining section for the circuit board which is frame (9), a mask (13) set on top of the circuit having holes corresponding to the holes of the circuit board as shown in figures 1-3, an extruding section (19, 17, 20) for extruding material into the hole of the mask, a first drive section for the extruding section (column 4, lines 3-9), a

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squeegee (29) for removing excess material from the mask and circuit board (column 5, lines 3-9), wherein the squeegee is attached to the extruding section and driven by the same driving means. This is clearly intended to be covered by claim 1 as evidenced by claim 5, which states that, the first and second drives are the same. The retaining means is capable of retaining a semiconductor element as such is merely intended usage.

6. Claims 1-4 and 8-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Lin et al (5,587,342: figures 3 and 5).

Lin et al teach a retaining means for a semiconductor device (10), a means for forming a drop of material in a hole in a mask (15) as disclosed in lines 1-9 of column 4, and a squeegee (40) for removing excess material. The means to move the drop supplying device and the squeegee are inherent as required for operability of the apparatus.

### Conclusion

- 7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The remaining references show various encapsulating devices.
- 8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert B. Davis whose telephone number is 703-308-2625. The examiner can normally be reached on Monday-Thursday 9:00-6:30 and on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on 703-308-3322. The fax phone numbers for

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the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Robert B. Davis Primary Examiner Art Unit 1722

April 8, 2002